

Remarks/Arguments

Applicant would like to thank Examiners Ramana and Robert for the courtesies extended to the Applicant's representatives at the interview summarized above.

Reconsideration of the above-identified application in view of the present amendment is respectfully requested.

By the present amendment, claims 1, 2, 17, 18, 24, 25, 41, and 45-47 have been amended. Claims 48 and 49, which correspond to claims 6 and 30 rewritten in independent form, have been added. Claims 50-59 have been added. Claims 6 and 30 have been canceled.

Claims 1-5, 7-12, 14-29 and 31-47 stand rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 6,485,491 to Farris et al. Claim 13 stands rejected under 35 U.S.C. § 103(a) as being obvious over the Farris et al. patent in view of U.S. Patent No. 5,135,489 to Jepson et al. Claims 41-44 also stand rejected under 35 U.S.C. §112, second paragraph, as being indefinite. Claims 6 and 30 are objected to as being dependent upon a rejected base claim.

Claims 6 and 30 were objected to as depending from a rejected claim and were indicated as being allowable if rewritten in independent form. Accordingly, claims 48 and 49, which correspond to claims 6 and 30 rewritten in independent form, are allowable.

It is respectfully submitted that claims 1-5, 7-29, and 31-47 are allowable. Specifically, claim 1 recites an apparatus including a longitudinal member connectable with a bone portion. A fastener having a longitudinal axis is engageable with the bone portion to connect the longitudinal member to the bone portion. A housing has a first passage configured to receive the longitudinal member. The

housing has a second passage with a longitudinal axis extending transverse to the first passage. The fastener extends through an opening in the housing into the second passage and is movable relative to the housing. The longitudinal axis of the fastener is positionable in any one of a plurality of desired angular positions relative to the longitudinal axis of the second passage. A spacer received in the second passage of the housing is engageable with the fastener and the longitudinal member. A member applies an axial force preventing relative movement between the fastener and the housing and holding the longitudinal axis of the fastener in any one of the plurality of desired angular positions relative to the longitudinal axis of the second passage when the longitudinal member is disengaged from the spacer and the spacer engages the fastener. The fastener and the housing are manually movable relative to each other against the force when the longitudinal member is disengaged from the spacer and the member applies the force. A clamping mechanism clamps the longitudinal member, the spacer and the housing to the fastener to prevent movement of the fastener relative to the housing.

U.S. Patent No. 6,485,491 to Farris et al. discloses a multi-axial bone anchor assembly 20 (Figs. 1-17) having a saddle member 22, a bone anchoring member 24, and a washer 26. The saddle member 22 has a channel 34 that receives a rod 36. The saddle member 22 also has a hole 38 perpendicular to channel 34 through which the anchoring member 24 extends. The anchoring member 24 is positionable in any one of a plurality of angular positions relative to the axis of the hole 38. A snap ring 28 engages a surface 83 on the washer 26 and extends into a groove 48 in the saddle member 22. The snap ring 28 applies a downward force to secure the washer 26 against the anchoring member 24, see column 7, lines 12-14. The downward force applied by the snap ring 28 does not prevent relative movement

between the saddle member 22 and the bone anchoring member 24 when the rod 36 is disengaged from the washer 26.

In another embodiment, a non-planar snap ring 28' (Fig. 17A) may be used in the assembly of Figs. 1-17 instead of the snap ring 28. The non-planar snap ring 28' has a series of undulations forming relative crests 129a and relative troughs 129b therein. Alternatively, the non-planar snap ring 28' could have other curved configurations, or could have extending finger-spring elements along it. The non-planar snap ring 28' allows less play between the saddle member 22, anchoring member 24, and washer 26 because the non-planar snap ring fills a greater portion of the groove 48 in the saddle member, see column 7, lines 32-43. Accordingly, the non-planar snap ring 28' reduces the amount of movement between the saddle member 22, anchoring member 24 and washer 26 when compared to the planar snap ring 28. The snap ring 28' does not prevent relative movement between the saddle member 22 and the bone anchoring member 24 when the rod 36 is disengaged from the washer 26.

The Farris et al. patent also discloses a multi-axial bone anchor assembly 262 (Figs. 53-56) having a saddle member 22d, a bone anchoring member 24a, and a washer 26d. The saddle member 22d has a channel 34d that receives a rod 36. The saddle member 22d also has a hole 38d perpendicular to channel 34d through which the anchoring member 24a extends. The anchoring member 24a is positionable in any one of a plurality of angular positions relative to the axis of the hole 38d. Snap ring 28 secures the washer 26d in the saddle member 22d. The snap ring 28 engages upper and lower radially extending surfaces of the washer 26d defining a snap ring recess 266, see Fig. 53. Accordingly, the snap ring 28 does not apply a downward force to secure the washer 26d against the anchoring member 24,

see Fig. 53. A non-planar snap ring 28' (Fig. 17A), as discussed above, may alternatively be used to secure the washer 26d in the saddle member 22d. The Farris et al. patent states that the non-planar snap ring 28' allows less play between the saddle member 22d, anchoring member 24a, and washer 26d, see column 7, lines 37-43. Accordingly, the non-planar snap ring 28' reduces the amount of movement between saddle member 22d, anchoring member 24a, and washer 26d when compared to the planar snap ring 28.

Anticipation requires a single prior art reference that discloses each element of the claim. W.L. Gore & Associates v. Garlock, Inc., 220 U.S.P.Q. 303, 313 (Fed. Cir. 1983), cert. denied 469 U.S. 851 (1984). Additionally, the single prior art reference must disclose each and every element of the claimed invention, arranged as in the claim. Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick Co., 221 U.S.P.Q. 481, 485 (Fed. Cir. 1984). "There must be no difference between the claimed invention and the reference disclosure, as viewed by a person of ordinary skill in the field of the invention". Scripps Clinic & Research Foundation v. Genentech Inc., 18 U.S.P.Q.2d 1001, 1010 (Fed. Cir. 1991).

The Farris et al. patent does not describe or suggest a member applying an axial force preventing relative movement between a fastener and a housing and holding a longitudinal axis of the fastener in any one of a plurality of desired angular positions relative to a longitudinal axis of a passage in the housing when a longitudinal member is disengaged from a spacer and the spacer engages the fastener. The Office Action states that the Farris et al. patent describes a snap ring that applies a force and has a gap. The snap rings 28 and 28' described in the Farris et al. patent do not apply an axial force preventing relative movement between the fasteners 24 and 24a and the saddle members 22 and 22d and holding

longitudinal axes of the fasteners in any one of a plurality of desired angular positions relative to longitudinal axes of passages in the saddle members. The Farris et al. patent states that the non-planar snap ring 28' reduces play between the saddle member 22d, the anchoring member 24a and the washer 26d and does not describe or suggest that the non-planar snap ring 28' prevents movement between the saddle member 22d and the anchoring member 24a and holds a longitudinal axis of the anchoring member in any one of a plurality of desired angular positions relative to a longitudinal axis of a passage in the saddle member. Furthermore, the Farris et al. patent does not describe or suggest a fastener and a housing being manually movable relative to each other against a force applied by a member when a longitudinal member is disengaged from a spacer and the member applies the force. The fasteners 24 and 24a and the saddle members 22 and 22d described in the Farris et al. patent do not move relative to each other against a force applied by the snap rings 28 and 28' preventing relative movement between the fasteners and the saddle members when the rod 36 is disengaged from the washers 26 and 26d.

The Office Action states that the snap ring 28 applies a force since the snap ring is placed in the groove of housing 22 in a compressed condition, see column 5, lines 7-12 and column 7, lines 12-31. The snap ring 28 described in the Farris et al. patent is radially compressed to place the snap ring in the groove in the housing 22. Accordingly, the snap ring 28 applies a radially outwardly directed force to the housing 22. Furthermore, the Farris et al. patent does not describe or suggest that the snap ring 28 applies an axial force preventing relative movement between the fastener 24 and the housing 22 when the longitudinal member 36 is disengaged from the washer 26.

The Office Action states that whether longitudinal member 36 described in the Farris et al. patent is disengaged from or engaged with the spacer 26d (Figs. 53-56) has no effect on the position of fastener 24a with respect to housing 22d as long as fastener 24a is engaged with the spacer through the snap-ring. The fastener 24a is not held in engagement with the spacer 26d by the snap ring 28, see Fig. 53. The snap ring 28 engages upper and lower radially extending surfaces of the washer 26d defining the snap ring recess 266, see Fig. 53. Accordingly, the snap ring 28 does not apply a downward force to secure the washer 26d against the anchoring member 24a. The snap ring 28 does not apply an axial force preventing relative movement between the fastener 24a and the housing 22d. The longitudinal member 36 must engage the spacer 26d to prevent relative movement between the fastener 24a and the housing 22d.

The Farris et al. patent does not describe or suggest a member applying an axial force preventing relative movement between a fastener and a housing and holding a longitudinal axis of the fastener in any one of a plurality of desired angular positions relative to a longitudinal axis of a second passage when a longitudinal member is disengaged from a spacer and the spacer engages the fastener. Furthermore, the Farris et al. patent does not describe or suggest a fastener and a housing being manually movable relative to each other against a force when a longitudinal member is disengaged from a spacer and a member applies the force. Thus, claim 1 is allowable.

Claim 2 recites that the member is an axially compressible member. None of the cited prior art describes or suggests an apparatus as set forth in claim 2 and including all the limitations of claim 1. Therefore, claim 2 is also allowable.

Claim 3 recites that the member is a spring member engaging the housing and the spacer. None of the cited prior art describes or suggests a spring member engaging a housing and a spacer and including all the limitations of claim 1. Therefore, claim 3 is allowable.

Claim 4 recites that the member includes a ring member extending into a groove in the spacer and a groove in the housing. None of the cited prior art describes or suggests a ring member extending into a groove in a spacer and a groove in a housing and including all the limitations of claims 1 and 3. Thus, claim 4 is allowable.

Claim 5 recites that the ring member has a gap to permit radial contraction and radial expansion of the ring member. None of the cited prior art describes or suggests a ring member having a gap to permit radial contraction and radial expansion of the ring member and including all the limitations of claims 1, 3, and 4. Therefore, claim 5 is also allowable.

Claim 7 recites that the ring member is arched when the ring member is disengaged from the housing and the spacer. None of the cited prior art describes or suggests a ring member that is arched when the ring member is disengaged from a housing and a spacer and including all the limitations of claims 1, 3, and 4. Therefore, claim 7 is also allowable.

Claim 8 recites that the fastener includes a first part spherical surface engageable with a part spherical surface of the housing. None of the cited prior art describes or suggests a fastener having a first part spherical surface engageable with a part spherical surface of a housing and including all the limitations of claim 1. Thus, claim 8 is allowable.

Claim 9 recites that the fastener includes a second part spherical surface engageable with the spacer. None of the cited prior art describes or suggests a fastener having a second part spherical surface engageable with a spacer and including all the limitations of claims 1 and 8. Therefore, claim 9 is also allowable.

Claim 10 recites that the fastener includes a surface engageable with the spacer to limit relative movement between the fastener and the housing. None of the cited prior art describes or suggests a fastener having a surface engageable with a spacer to limit relative movement between the fastener and a housing and including all the limitations of claims 1, 8, and 9. Therefore, claim 10 is also allowable.

Claim 11 recites that the second part spherical surface has a diameter smaller than a diameter of the first part spherical surface. The surface engageable with the spacer to limit relative movement between the fastener and the housing extends between the first and second part spherical surfaces. None of the cited prior art describes or suggests a surface engageable with a spacer to limit relative movement between a fastener and a housing extending between first and second part spherical surfaces with the second part spherical surface having a diameter smaller than a diameter of the first part spherical surface and including all the limitations of claims 1 and 8-10. Thus, claim 11 is allowable.

Claim 12 recites that the spacer has an opening through which a tool extends to engage the fastener when the longitudinal member is disengaged from the spacer. None of the cited prior art describes or suggests a spacer having an opening through which a tool extends to engage a fastener when a longitudinal member is disengaged from the spacer and including all the limitations of claim 1. Therefore, claim 12 is also allowable.

Claim 13 recites that the spacer includes slots that receive a tool for inserting the spacer into the housing. None of the cited prior art describes or suggests a spacer including slots that receive a tool for inserting the spacer into the housing. U.S. Patent No. 5,135,489 to Jepson et al. describes a heparin lock 436 (Fig. 48) for attaching to a patient's catheter. The heparin lock 436 has a male luer 438 with a gripping collar 446. A series of axial grooves 450 are provided in the exterior surface of the collar 446 to improve gripping by a nurse, physician, or attending staff member. Accordingly, the grooves 450 do not receive a tool. Threads 448 are provided on the interior surface of the collar 446 for threadably engaging a luer lock connector. The Jepson et al. patent does not describe or suggest a spacer having slots that receive a tool for inserting the spacer into a housing.

It is respectfully submitted that there is no suggestion in the Farris et al. patent and the Jepson et al. patent to combine the teachings of the references. The Farris et al. patent describes multi-axial bone anchor assemblies and the Jepson et al. patent describes a male luer of a heparin lock for attaching to a catheter in Fig. 48. The Farris et al. patent describes a washer for slidably inserting into a saddle member and the Jepson et al. patent describes a male luer with a collar having threads for threadably engaging a luer lock connector. Accordingly, the Farris et al. patent and the Jepson et al. patent describe entirely different structures for entirely different uses. Thus, there is no suggestion in the Farris et al. patent and the Jepson et al. patent to combine the teachings of the references.

Assuming, arguendo, that the teachings of the Farris et al. patent and the Jepson et al. patent were combined, the resulting combination would lack features of the apparatus defined in claim 13. The resulting combination would not include a spacer having slots that receive a tool for inserting the spacer into a housing since

neither of the references describes a spacer having slots that receive a tool for inserting the spacer into a housing.

It appears the Examiner is using hindsight in finding that the present claim is obvious. The use of the teachings of the present invention to find obviousness is impermissible.

“The court must be ever alert not to read obviousness into an invention on the basis of applicant’s own teachings. The issue, then, is whether the teachings of the prior art would, in and of themselves and without the benefits of appellant’s disclosure, make the invention as a whole obvious.” In Re Sponnoble, 160 USPQ 237 at 243 (CCPA 1969) (emphasis in original).

Accordingly, the Examiner must consider only the teachings of the prior art references. The Farris et al. patent and the Jepson et al. patent do not describe or suggest a spacer having slots that receive a tool for inserting the spacer into a housing. Thus, claim 13 is allowable.

Claim 14 recites that the clamping mechanism includes a threaded member threadably engageable with the housing. None of the cited prior art describes or suggests a clamping mechanism including a threaded member threadably engageable with a housing and including all the limitations of claim 1. Therefore, claim 14 is also allowable.

Claim 15 recites that the threaded member engages the longitudinal member to clamp the longitudinal member against the spacer. None of the cited prior art describes or suggests a threaded member engaging a longitudinal member to clamp the longitudinal member against a spacer and including all the limitations of claims 1 and 14. Therefore, claim 15 is allowable.

Claim 16 recites that the threaded member and the housing have a buttress thread. None of the cited prior art describes or suggests a threaded member and a

housing having a buttress thread and including all the limitations of claims 1 and 14. Thus, claim 15 is also allowable.

Claim 17 recites an apparatus including a longitudinal member connectable with a bone portion. A fastener having a longitudinal axis is engageable with the bone portion to connect the longitudinal member to the bone portion. A housing has a first passage configured to receive the longitudinal member. The housing has a second passage with a longitudinal axis extending transverse to the first passage. The fastener extends through an opening in the housing into the second passage and is movable relative to the housing. The longitudinal axis of the fastener is positionable in any one of a plurality of desired angular positions relative to the longitudinal axis of the second passage. A spring member applies an axial force preventing relative movement between the fastener and the housing and holding the longitudinal axis of the fastener in any one of the plurality of desired angular positions relative to the longitudinal axis of the second passage. The fastener and the housing are manually movable relative to each other against the force when the spring member applies the force. A clamping mechanism clamps the longitudinal member and the housing to the fastener to prevent movement of the fastener relative to the housing. None of the cited prior art describes or suggests an apparatus as set forth in claim 17.

Anticipation requires a single prior art reference that discloses each element of the claim. W.L. Gore & Associates v. Garlock, Inc., 220 U.S.P.Q. 303, 313 (Fed. Cir. 1983), cert. denied 469 U.S. 851 (1984). Additionally, the single prior art reference must disclose each and every element of the claimed invention, arranged as in the claim. Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick Co., 221 U.S.P.Q. 481, 485 (Fed. Cir. 1984). "There must be no difference

between the claimed invention and the reference disclosure, as viewed by a person of ordinary skill in the field of the invention”. Scripps Clinic & Research Foundation v. Genentech Inc., 18 U.S.P.Q.2d 1001, 1010 (Fed. Cir. 1991).

The Farris et al. patent does not describe or suggest a spring member applying an axial force preventing relative movement between a fastener and a housing and holding a longitudinal axis of the fastener in any one of a plurality of desired angular positions relative to a longitudinal axis of a second passage in the housing. The Office Action states that the Farris et al. patent describes a snap ring that applies a force and has a gap. The snap rings 28 and 28' described in the Farris et al. patent do not apply an axial force preventing relative movement between the fasteners 24 and 24a and the saddle members 22 and 22d and holding longitudinal axes of the fasteners in any one of a plurality of desired angular positions relative to longitudinal axes of passages in the saddle members. The Farris et al. patent states that the non-planar snap ring 28' reduces play between the saddle member 22d, the anchoring member 24a and the washer 26d and does not describe or suggest that the non-planar snap ring 28' prevents movement between the saddle member 22d and the anchoring member 24a. Furthermore, the Farris et al. patent does not describe or suggest a fastener and a housing being manually movable relative to each other against a force applied by a spring member when the spring member applies the force. The fasteners 24 and 24a and the saddle members 22 and 22d described in the Farris et al. patent do not move relative to each other against a force applied by the snap rings 28 and 28' preventing relative movement between the fasteners and the saddle members.

The Office Action states that the snap ring 28 applies a force since the snap ring is placed in the groove of housing 22 in a compressed condition, see column 5,

lines 7-12 and column 7, lines 12-31. The snap ring 28 described in the Farris et al. patent is radially compressed to place the snap ring in the groove in the housing 22. Accordingly, the snap ring 28 applies a radially outwardly directed force to the housing 22. Furthermore, the Farris et al. patent does not describe or suggest that the snap ring 28 applies an axial force preventing relative movement between the fastener 24 and the housing 22.

The Office Action states that whether longitudinal member 36 described in the Farris et al. patent is disengaged from or engaged with the spacer 26d (Figs. 53-56) has no effect on the position of fastener 24a with respect to housing 22d as long as fastener 24a is engaged with the spacer through the snap-ring. The fastener 24a is not held in engagement with the spacer 26d by the snap ring 28, see Fig. 53. The snap ring 28 engages upper and lower radially extending surfaces of the washer 26d defining the snap ring recess 266, see Fig. 53. Accordingly, the snap ring 28 does not apply a downward force to secure the washer 26d against the anchoring member 24a. The snap ring 28 does not apply an axial force preventing relative movement between the fastener 24a and the housing 22d. The longitudinal member 36 must engage the spacer 26d to prevent relative movement between the fastener 24a and the housing 22d.

The Farris et al. patent does not describe or suggest a spring member applying an axial force preventing relative movement between a fastener and a housing and holding the longitudinal axis of the fastener in any one of a plurality of desired angular positions relative to a longitudinal axis of a second passage in the housing. Furthermore, the Farris et al. patent does not describe or suggest a fastener and a housing being manually movable relative to each other against a force when a spring member applies the force. Thus, claim 17 is allowable.

Claim 18 depends from claim 1 and recites that the member applies the axial force to the spacer to prevent the fastener and the housing from moving relative to each other. None of the cited prior art describes or suggests a member applying an axial force to a spacer preventing a fastener and a housing from moving relative to each other. The snap rings described in the Farris et al. patent do not apply an axial force preventing a fastener and a housing from moving relative to each other. Therefore, claim 18 is allowable.

Claim 19 recites that the member engages a radially extending surface on the housing and a radially extending surface on the spacer. None of the cited prior art describes or suggests a member engaging a radially extending surface on a housing and a radially extending surface on a spacer and including all the limitations of claims 1 and 18. Therefore, claim 19 is also allowable.

Claim 20 recites that the radially extending surface on the housing at least partially defines a circumferential groove in the housing. The radially extending surface on the spacer at least partially defines a circumferential groove in the spacer. None of the cited prior art describes or suggests a radially extending surface on a housing at least partially defining a circumferential groove in the housing and a radially extending surface on a spacer at least partially defining a circumferential groove in the spacer and including all the limitations of claims 1, 18, and 19. Thus, claim 20 is allowable.

Claim 21 recites that the spacer includes first and second radially extending surfaces and an axially extending surface defining the groove in the spacer. None of the cited prior art describes or suggests a spacer including first and second radially extending surfaces and an axially extending surface defining a groove in a spacer and including all the limitations of claims 1 and 18-20. Thus, claim 21 is allowable.

Claim 22 depends from claim 4 and recites that the spacer includes first and second radially extending surfaces and an axially extending surface defining the groove in the spacer. None of the cited prior art describes or suggests a spacer including first and second radially extending surfaces and an axially extending surface defining a groove in a spacer and including all the limitations of claims 1 and 3-4. Thus, claim 22 is also allowable.

Claim 23 depends from claim 17 and recites that the spring member applies the axial force to the spacer to prevent the fastener and the housing from moving relative to each other. None of the cited prior art describes or suggests a spring member applying an axial force to a spacer to prevent a fastener and a housing from moving relative to each other. Thus, claim 23 is also allowable.

Claim 24 recites an apparatus including a longitudinal member connectable with a bone portion. A fastener having a longitudinal axis is engageable with the bone portion to connect the longitudinal member to the bone portion. A housing has a first passage configured to receive the longitudinal member. The housing has a second passage with a longitudinal axis extending transverse to the first passage. The fastener extends through an opening in the housing into the second passage and is movable relative to the housing. The longitudinal axis of the fastener is positionable in any one of a plurality of desired angular positions relative to the longitudinal axis of the second passage. A spacer received in the second passage of the housing is engageable with the fastener and the longitudinal member. A member includes means for applying an axial force and for preventing relative movement between the fastener and the housing when the longitudinal member is disengaged from the spacer and the spacer engages the fastener. The member includes means for permitting manual movement of the fastener and the housing

relative to each other against the force when the longitudinal member is disengaged from the spacer and the force is applied. A clamping mechanism clamps the longitudinal member, the spacer and the housing to the fastener to prevent movement of the fastener relative to the housing. None of the cited prior art describes or suggests an apparatus as set forth in claim 24.

Anticipation requires a single prior art reference that discloses each element of the claim. W.L. Gore & Associates v. Garlock, Inc., 220 U.S.P.Q. 303, 313 (Fed. Cir. 1983), cert. denied 469 U.S. 851 (1984). Additionally, the single prior art reference must disclose each and every element of the claimed invention, arranged as in the claim. Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick Co., 221 U.S.P.Q. 481, 485 (Fed. Cir. 1984). "There must be no difference between the claimed invention and the reference disclosure, as viewed by a person of ordinary skill in the field of the invention". Scripps Clinic & Research Foundation v. Genentech Inc., 18 U.S.P.Q.2d 1001, 1010 (Fed. Cir. 1991).

The Farris et al. patent does not describe or suggest a member including means for applying an axial force and for preventing relative movement between a fastener and a housing when a longitudinal member is disengaged from a spacer and the spacer engages the fastener. The Office Action states that the Farris et al. patent describes a snap ring that applies a force and has a gap. The snap rings 28 and 28' described in the Farris et al. patent do not include means for applying an axial force and for preventing relative movement between the fasteners 24 and 24a and the saddle members 22 and 22d. The Farris et al. patent states that the non-planar snap ring 28' reduces play between the saddle member 22d, the anchoring member 24a and the washer 26d and does not describe or suggest that the non-planar snap ring 28' prevents movement between the saddle member 22d and the

anchoring member 24a. Furthermore, the Farris et al. patent does not describe or suggest a member including means for permitting manual movement of a fastener and a housing relative to each other against a force when a longitudinal member is disengaged from a spacer and the force is applied. The fasteners 24 and 24a and the saddle members 22 and 22d described in the Farris et al. patent do not move relative to each other against a force applied by the snap rings 28 and 28' preventing relative movement between the fasteners and the saddle members when the rod 36 is disengaged from the washers 26 and 26d.

The Office Action states that the snap ring 28 applies a force since the snap ring is placed in the groove of housing 22 in a compressed condition, see column 5, lines 7-12 and column 7, lines 12-31. The snap ring 28 described in the Farris et al. patent is radially compressed to place the snap ring in the groove in the housing 22. Accordingly, the snap ring 28 applies a radially outwardly directed force to the housing 22. Furthermore, the Farris et al. patent does not describe or suggest that the snap ring 28 applies an axial force preventing relative movement between the fastener 24 and the housing 22 when the longitudinal member 36 is disengaged from the washer 26.

The Office Action states that whether longitudinal member 36 described in the Farris et al. patent is disengaged from or engaged with the spacer 26d (Figs. 53-56) has no effect on the position of fastener 24a with respect to housing 22d as long as fastener 24a is engaged with the spacer through the snap-ring. The fastener 24a is not held in engagement with the spacer 26d by the snap ring 28, see Fig. 53. The snap ring 28 engages upper and lower radially extending surfaces of the washer 26d defining the snap ring recess 266, see Fig. 53. Accordingly, the snap ring 28 does not apply a downward force to secure the washer 26d against the anchoring

member 24a. The snap ring 28 does not apply an axial force preventing relative movement between the fastener 24a and the housing 22d. The longitudinal member 36 must engage the spacer 26d to prevent relative movement between the fastener 24a and the housing 22d.

The Farris et al. patent does not describe or suggest a member including means for applying an axial force and for preventing relative movement between a fastener and a housing when a longitudinal member is disengaged from a spacer and the spacer engages the fastener. Furthermore, the Farris et al. patent does not describe or suggest a member including means for permitting manual movement of a fastener and a housing relative to each other against a force when a longitudinal member is disengaged from a spacer and the force is applied.

Claim 25 recites that the member is an axially compressible member. None of the cited prior art describes or suggests an axially compressible member and including all the limitations of claim 24. Therefore, claim 25 is also allowable.

Claims 26-29 and 31-40 depend from claim 24 and are allowable for the specific recitations therein and for the same reasons as claim 24.

Claim 41 depends from claim 24 and recites that the member includes means for applying the axial force to the spacer to prevent the fastener and the housing from moving relative to each other. It is respectfully submitted that claim 41 is not indefinite. 35 U.S.C. §112 paragraph 6 states that an element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof. Thus, claim 41 is allowable.

Claims 42-44 depend from claim 41 and are allowable for the specific recitations therein and for the same reasons as claim 41.

Claim 45 recites an apparatus including a longitudinal member connectable with a bone portion. A fastener having a longitudinal axis is engageable with a bone portion to connect the longitudinal member to the bone portion. A housing has a first passage configured to receive the longitudinal member. The housing has a second passage with a longitudinal axis extending transverse to the first passage. The fastener extends through an opening in the housing into the second passage and is movable relative to the housing. The longitudinal axis of the fastener is positionable in any one of a plurality of desired angular positions relative to the longitudinal axis of the second passage. A spring member has means for applying an axial force and for preventing relative movement between the fastener and the housing. The spring member includes means for permitting manual movement of the fastener and the housing relative to each other against the force when the force is applied. A clamping mechanism clamps the longitudinal member and the housing to the fastener to prevent movement of the fastener relative to the housing.

Anticipation requires a single prior art reference that discloses each element of the claim. W.L. Gore & Associates v. Garlock, Inc., 220 U.S.P.Q. 303, 313 (Fed. Cir. 1983), cert. denied 469 U.S. 851 (1984). Additionally, the single prior art reference must disclose each and every element of the claimed invention, arranged as in the claim. Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick Co., 221 U.S.P.Q. 481, 485 (Fed. Cir. 1984). "There must be no difference between the claimed invention and the reference disclosure, as viewed by a person of ordinary skill in the field of the invention". Scripps Clinic & Research Foundation v. Genentech Inc., 18 U.S.P.Q.2d 1001, 1010 (Fed. Cir. 1991).

The Farris et al. patent does not describe or suggest a spring member having means for applying an axial force and for preventing relative movement between a fastener and a housing. The Office Action states that the Farris et al. patent describes a snap ring that applies a force and has a gap. The snap rings 28 and 28' described in the Farris et al. patent do not include means for applying an axial force and for preventing relative movement between the fasteners 24 and 24a and the saddle members 22 and 22d. The Farris et al. patent states that the non-planar snap ring 28' reduces play between the saddle member 22d, the anchoring member 24a and the washer 26d and does not describe or suggest that the non-planar snap ring 28' prevents movement between the saddle member 22d and the anchoring member 24a. Furthermore, the Farris et al. patent does not describe or suggest a spring member including means for permitting manual movement of a fastener and a housing relative to each other against a force when the force is applied. The fasteners 24 and 24a and the saddle members 22 and 22d described in the Farris et al. patent do not move relative to each other against an axial force applied by the snap rings 28 and 28' preventing relative movement between the fasteners and the saddle members.

The Office Action states that the snap ring 28 applies a force since the snap ring is placed in the groove of housing 22 in a compressed condition, see column 5, lines 7-12 and column 7, lines 12-31. The snap ring 28 described in the Farris et al. patent is radially compressed to place the snap ring in the groove in the housing 22. Accordingly, the snap ring 28 applies a radially outwardly directed force to the housing 22. Furthermore, the Farris et al. patent does not describe or suggest that the snap ring 28 applies an axial force preventing relative movement between the

fastener 24 and the housing 22 when the longitudinal member 36 is disengaged from the washer 26.

The Office Action states that whether longitudinal member 36 described in the Farris et al. patent is disengaged from or engaged with the spacer 26d (Figs. 53-56) has no effect on the position of fastener 24a with respect to housing 22d as long as fastener 24a is engaged with the spacer through the snap-ring. The fastener 24a is not held in engagement with the spacer 26d by the snap ring 28, see Fig. 53. The snap ring 28 engages upper and lower radially extending surfaces of the washer 26d defining the snap ring recess 266, see Fig. 53. Accordingly, the snap ring 28 does not apply a downward force to secure the washer 26d against the anchoring member 24a. The snap ring 28 does not apply an axial force preventing relative movement between the fastener 24a and the housing 22d. The longitudinal member 36 must engage the spacer 26d to prevent relative movement between the fastener 24a and the housing 22d.

The Farris et al. patent does not describe or suggest a spring member having means for applying an axial force and for preventing relative movement between a fastener and a housing. Furthermore, the Farris et al. patent does not describe or suggest a spring member including means for permitting manual movement of a fastener and a housing relative to each other against a force when the force is applied. Thus, claim 45 is allowable.

Claim 46 recites that the spring member applies the axial force to the spacer to prevent the fastener and the housing from moving relative to each other. None of the cited prior art describes or suggests a spring member applying an axial force to a spacer to prevent a fastener and a housing from moving relative to each other and including all the limitations of claim 45. Therefore, claim 46 is also allowable.

Claim 47 recites an apparatus including a longitudinal member connectable with a bone portion. A fastener having a longitudinal axis is engageable with the bone portion to connect the longitudinal member to the bone portion. A housing has a first passage configured to receive the longitudinal member. The housing has a second passage with a longitudinal axis extending transverse to the first passage. The fastener extends through an opening in the housing into the second passage. The housing is movable relative to the fastener. The longitudinal axis of the second passage is positionable in any one of a plurality of desired angular positions relative to the longitudinal axis of the fastener. A spacer received in the second passage of the housing is engageable with the fastener and the longitudinal member. A member applies an axial force holding the longitudinal axis of the second passage of the housing in any one of the plurality of desired angular positions relative to the longitudinal axis of the fastener when the longitudinal member is disengaged from the spacer and the spacer engages the fastener. The fastener and the housing are manually movable relative to each other against the force when the longitudinal member is disengaged from the spacer and the member applies the force. A clamping mechanism clamps the longitudinal member, the spacer and the housing to the fastener to prevent movement of the housing relative to the fastener.

Anticipation requires a single prior art reference that discloses each element of the claim. W.L. Gore & Associates v. Garlock, Inc., 220 U.S.P.Q. 303, 313 (Fed. Cir. 1983), cert. denied 469 U.S. 851 (1984). Additionally, the single prior art reference must disclose each and every element of the claimed invention, arranged as in the claim. Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick Co., 221 U.S.P.Q. 481, 485 (Fed. Cir. 1984). "There must be no difference between the claimed invention and the reference disclosure, as viewed by a person of ordinary

skill in the field of the invention". Scripps Clinic & Research Foundation v. Genentech Inc., 18 U.S.P.Q.2d 1001, 1010 (Fed. Cir. 1991).

The Farris et al. patent does not describe or suggest a member applying an axial force holding a longitudinal axis of a second passage of a housing in any one of a plurality of desired angular positions relative to a longitudinal axis of a fastener when a longitudinal member is disengaged from a spacer and the spacer engages the fastener. The Office Action states that the Farris et al. patent describes a snap ring that applies a force and has a gap. The snap rings 28 and 28' described in the Farris et al. patent do not apply an axial force holding the longitudinal axes of the second passages of the housings 22 and 22d in any one of a plurality of desired angular positions relative to the longitudinal axes of the fasteners 24 and 24a when the longitudinal member 36 is disengaged from the washers 26 and 26d and the washers engage the fasteners. The Farris et al. patent states that the non-planar snap ring 28' reduces play between the saddle member 22d, the anchoring member 24a and the washer 26d and does not describe or suggest that the non-planar snap ring 28' prevents movement between the saddle member 22d and the anchoring member 24a. Furthermore, the Farris et al. patent does not describe or suggest a fastener and a housing being manually movable relative to each other against a force when a longitudinal member is disengaged from a spacer and a member applies the force. The fasteners 24 and 24a and the saddle members 22 and 22d described in the Farris et al. patent do not move relative to each other against a force applied by the snap rings 28 and 28' that holds the longitudinal axes of the saddle members in any one of a plurality of desired angular positions relative to longitudinal axes of the fasteners when the rod 36 is disengaged from the washers 26 and 26d.

The Office Action states that the snap ring 28 applies a force since the snap ring is placed in the groove of housing 22 in a compressed condition, see column 5, lines 7-12 and column 7, lines 12-31. The snap ring 28 described in the Farris et al. patent is radially compressed to place the snap ring in the groove in the housing 22. Accordingly, the snap ring 28 applies a radially outwardly directed force to the housing 22. Furthermore, the Farris et al. patent does not describe or suggest that the snap ring 28 applies an axial force holding the longitudinal axis of the saddle member 22 in any one of a plurality of desired angular positions relative to a longitudinal axis of the fastener 24 when the rod 36 is disengaged from the washer 26.

The Office Action states that whether longitudinal member 36 described in the Farris et al. patent is disengaged from or engaged with the spacer 26d (Figs. 53-56) has no effect on the position of fastener 24a with respect to housing 22d as long as fastener 24a is engaged with the spacer through the snap-ring. The fastener 24a is not held in engagement with the spacer 26d by the snap ring 28, see Fig. 53. The snap ring 28 engages upper and lower radially extending surfaces of the washer 26d defining the snap ring recess 266, see Fig. 53. Accordingly, the snap ring 28 does not apply a downward force to secure the washer 26d against the anchoring member 24a. The snap ring 28 does not apply an axial force holding the longitudinal axis of the saddle member 22d in any one of a plurality of desired angular positions relative to a longitudinal axis of the fastener 24a. The longitudinal member 36 must engage the spacer 26d to prevent relative movement between the fastener 24a and the housing 22d.

The Farris et al. patent does not describe or suggest a member applying an axial force holding a longitudinal axis of a second passage of a housing in any one of


a plurality of desired angular positions relative to a longitudinal axis of a fastener when a longitudinal member is disengaged from a spacer and the spacer engages the fastener. Also, the Farris et al. patent does not describe or suggest a fastener and a housing being manually movable relative to each other against a force that holds a longitudinal axis of a second passage of the housing in any one of a plurality of desired angular positions relative to a longitudinal axis of the fastener when a longitudinal member is disengaged from a spacer and a member applies the force. Thus, claim 47 is allowable.

Claims 50-59 depend from claims 1, 17, 24, 45, and 47 and are allowable for the specific recitations therein and for the same reasons as claims 1, 17, 24, 45, and 47.

In view of the foregoing, it is respectfully submitted that the above-identified application is in condition for allowance, and allowance of the above-identified application is respectfully requested.

Please charge any deficiency or credit any overpayment in the fees for this amendment to our Deposit Account No. 20-0090.

Respectfully submitted,


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